

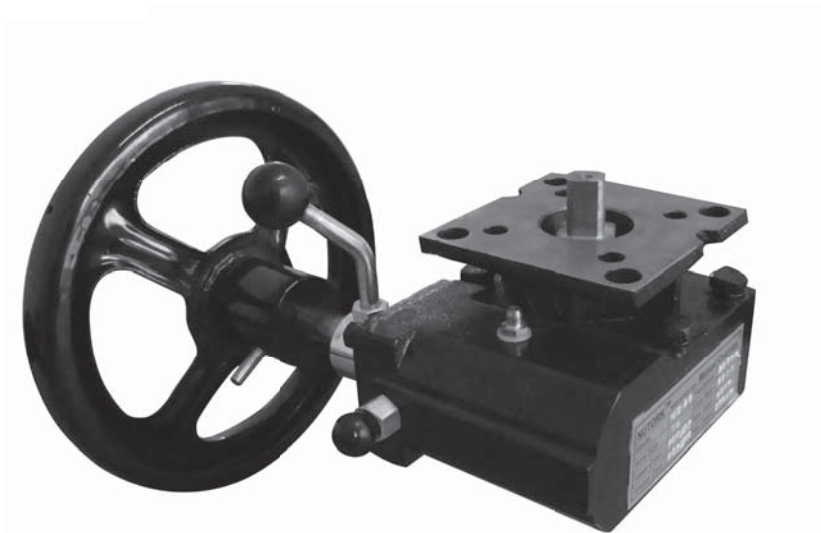


# NUTORK®

Actuators & Valves

## Declutchable Wormgear Manual Override

Cast Iron & Ductile Iron Body  
Output Torque: 300~70000Nm



# Declutchable Wormgear Manual Override

# NUTORK®



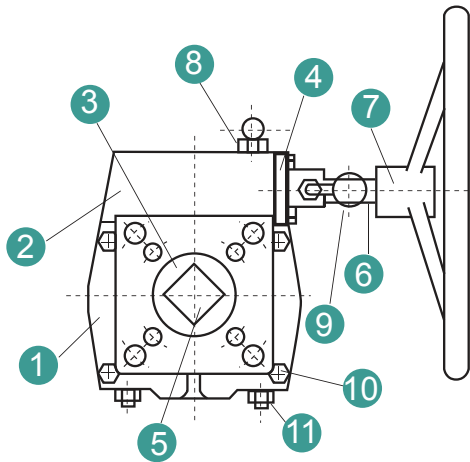
Cast Iron & Ductile Iron Body

## FEATURES

- \* ISO5211 Compliant upper and lower mounting patterns.
- \* ISO5211 Compliant upper male square drive provide direct mount to ISO compliant actuators without adapters. and female “ double square ” lower drive provide direct mount to ISO compliant valves.
- \* Dual position limit stops
- \* External lube fitting
- \* Roller thrust bearings on worm gear for improve efficiency

## Material of Construction

Item	Description	Standard Material	
		MO30-MO850	MO1200-MO7000
	Model	MO30-MO850	MO1200-MO7000
1	Cover	Cast Iron	Ductile Iron
2	Body	Cast Iron	Ductile Iron
3	Drive Gear	Ductile Iron	
4	Gear Cover	Cast Iron	Ductile Iron
5	Upper Male Square Stem	Carbon Steel	
6	Handwheel Shaft	Carbon Steel with Chrome Plated	
7	Handwheel	Plated Carbon Steel	
8	Position Lock Assy	Plated Carbon Steel	
9	Position Lever Assy	Plated Carbon Steel	
10	Cover Bolts	Carbon Steel with Zinc Plated	
11	Limit Stops	Stainless Steel	
12	Gear Cover Bolts	Carbon Steel with Zinc Plated	
13	Shaft Bushings	Carbon Steel	
14	Grease Fitting	Brass	
15	Nameplate	Stainless Steel	
16	O-Rings	NBR(Buna-N)	



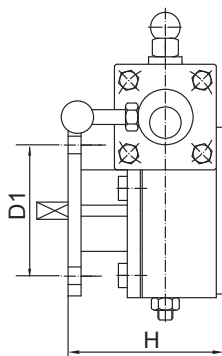
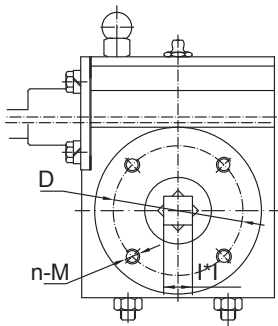
Note: Item 12~16 is not shown.

## Performance Data Table of MO Series Cast Iron & Ductile Iron Body

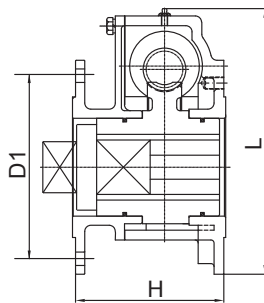
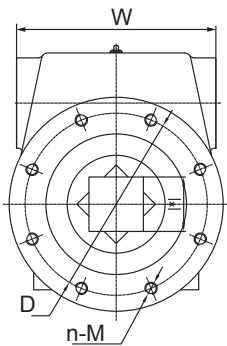
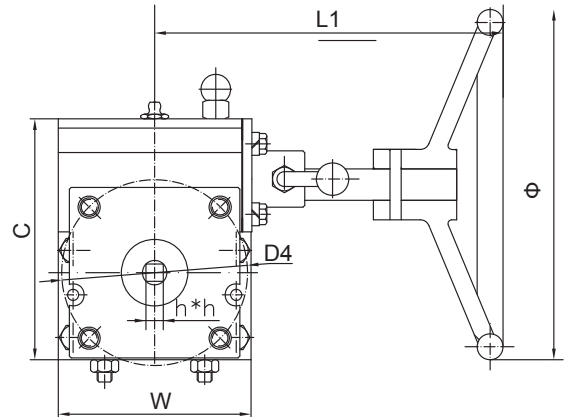
Model	Gear Ratio	Mechanical Efficiency(%)	Max. Output Torque (Nm)	Weight (kg)	Double Acting Actuator Model	Single Acting Actuator Model
MO30	26:1	25	300	6	NKD063~NKD105	NKS063~NKS125
MO70	38:1	29	700	13	NKD125~NKD140	NKS125~NKS160
MO120	54:1	18	1200	17	NKD160~NKD190	NKS160~NKS190
MO200	80:1	20	2000	22	NKD210/ NSF14DA	NKS-190~NKS-210/ NSF14SR
MO310	78:1	25	3100	34	NKD240/ NSF14DA	NKS210~NKS240/ NSF14SR
MO850	315:1	14.8	8500	106	NKD270~NKD300/ NSF16DA	NKS240~NKS270/ NSF14SR~NSF25SR
MO1200	333:1	15	12000	159	NSF25DA	NSF25SR
MO1800	490:1	21	18000	178	NSF30DA	NSF25SR~NSF30SR
MO2500	623:1	20.8	25000	210	NSF30DA	NSF30SR
MO3200	945:1	19.9	32000	280	NSF35DA	NSF35SR
MO7000	1460:1	21.3	70000	400	NSF40DA	NSF40SR

# Declutchable Wormgear Manual Override

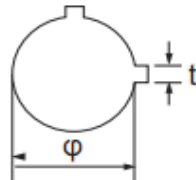
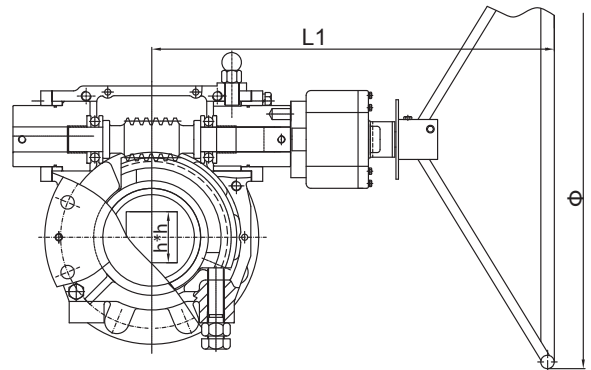
# NUTORK®



MO30~MO850



MO1200~MO7000



Dimension Table of MO Series Cast Iron & Ductile Iron Body

Model	ISO5211 Top Flange (D1)	Top Connection for Actuator (mm)		ISO5211 Bottom Flange (D)	Bottom Connection for Valve (mm)		n-M	(L) Length (mm)	(W) Width (mm)	(H) Height (mm)	(L1) Center to Hand wheel	(φ) Hand wheel Dia. (mm)	
		Male Square (h*h)	Round Dia. *Pin Width/ Height (φ*t)		Double Square (l*I)	Round Dia. *Pin Width/ Height (φ*t)							
MO30	F07/F10	◇14	Please Consult Factory	F05/F07	◇22	φ22*6/35	4-M8	166	104	85	191	200	
MO70	F07/F10	◇22		F07/F10	◇36	φ45*14/38	4-M8 4-M10	191	125	84	225	300	
MO120	F12/F14	◇27		F10 or F12	◇36	φ60*18/45	4-M10 4-M12	234	175	87	233	300	
MO200	F14/F16	◇36		F14 or F16	◇36	φ60*18/55	4-M16 4-M20	311	234	115	277	400	
MO310	F14/F16	◇36		F14 or F16	◇46	φ65*18/62	4-M16 4-M20	351	276	117	363	600	
MO850	F16/F25	◇46		φ70*20/144	F16/F25	◇55	φ70*20/100	4-M20 8-M16	386	300	244	463	700
MO1200	F25/F30	◇55		φ100*28/134	F25 or F30	◇55	φ100*28/108	8-M16 8-M20	456	360	242	588	800
MO1800	F25/F30	◇75	φ120*32/117	F25 or F30	◇75	φ120*32/125	8-M16 8-M20	435	350	252	659	750	
MO2500	F30/F35	◇100	φ148*36/120	F30 or F35	◇100	φ148*36/132	8-M20 8-M30	532	415	252	692	750	
MO3200	F30/F35	◇100	φ148*36/125	F30 or F35	◇100	φ148*36/140	8-M20 8-M30	596	415	265	714	750	
MO7000	F35/F40	◇100	φ148*36/125	F35 or F40	◇100	φ148*36/140	8-M20 8-M36	660	415	310	805	1000	

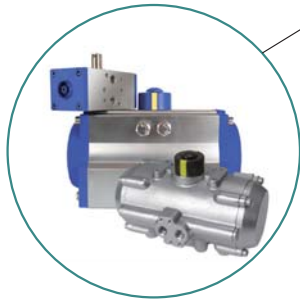
Dimensions are only for reference. Nutork Corp. reserves the right to change the parameters without prior notice.

## Order Information

Product Model	Upper Mounting Connection			Lower Mounting Connection			Hand wheel (mm)	
	Top Male Square	Upper Round Dia. Conn. Option	Upper ISO Pattern	Lower Female Double Square	Lower Round Dia. Conn. Option	Lower ISO Pattern		
MO30:300Nm	◇14mm	Please Consult Factory	F07/F10	◇22	φ22*6 / 35	F05/F07	200	
MO70:700Nm	◇22mm		F07/F10	◇36	φ45*14 / 38	F07/F10	300	
MO120:1200Nm	◇27mm		F12/F14	◇36	φ60*18 / 45	F10 or F12	300	
MO200:2000Nm	◇36mm		F14/F16	◇36	φ60*18 / 55	F14 or F16	400	
MO310:3100Nm	◇36mm		F14/F16	◇46	φ65*18 / 62	F14 or F16	600	
MO850:8500Nm	◇46mm		φ70*20 / 144	F16/F25	◇55	φ70*20 / 100	F16/F25	700
MO1200:12000Nm	◇55mm		φ100*28 / 134	F25/F30	◇55	φ100*28 / 108	F25 or F30	800
MO1800:18000Nm	◇75mm		φ120*32 / 117	F25/F30	◇75	φ120*32 / 125	F25 or F30	750
MO2500:25000Nm	◇100mm		φ148*36 / 120	F30/F35	◇100	φ148*36 / 132	F30 or F35	750
MO3200:32000Nm	◇100mm		φ148*36 / 125	F30/F35	◇100	φ148*36 / 140	F30 or F35	750
MO7000:70000Nm	◇100mm	φ148*36 / 125	F35/F40	◇100	φ148*36 / 140	F35 or F40	1000	

Dimensions are only for reference. Nutork Corp. reserves the right to change the parameters without prior notice.

**NUTORK CORP.** manufactures a wide range of pneumatic actuators, electric actuators and the accessories of pneumatic actuator (limit switchbox, solenoid valve, manual override ---etc.) for quarter turn valves



Rack & Pinion Type Pneumatic Actuator.  
**(Certificated by CE-ATEX/SIL3)**  
**Max. Output Torque: 9340Nm**



Scotch Yoke Type Pneumatic & Hydraulic Actuator.  
**(Certificated by CE-ATEX/SIL3)**  
**Max. Output Torque 293800Nm**



NTQ Series Electric Actuator  
IP67/IP68(30M@24hrs)Enclosure & EExdIIBT6Max. Output Torque 6000Nm  
Approved by SIL3/IP68/MD/LVD/EMC.



NTE Series Electric Actuator  
IP67/IP68(30M@24hrs)  
EnclosureMax. Output Torque 6000Nm  
Approved by SIL3/IP68/MD/LVD/EMC.



Limit Switchbox IP67/IP68(50M@72hrs)  
Enclosure & EExdIIBT6/EEExdIICT6



Solenoid Valve 3/2NC & 5/2 Way, Static O-ring Sealing Design.  
Aluminum & 316SS Body  
IP67 & EExdIIBT6/EEExdIICT6



Air Filter Regulator Aluminum Body with Vinyl Paint & 316SS Body.  
Size: 1/4" ~ 1"



Manual Override Aluminum & Cast Iron & Ductile Iron Body  
Max Output Torque 70000Nm



Ball valve (Floating ball design),  
We can provide different pressure rating/ connection type/ operation mode.



Concentric Soft Seated Butterfly Valve  
High Performance Double Eccentric Butterfly Valve  
High Performance Triple Offset Metal Seated Butterfly Valve  
We can provide different pressure rating/ connection type/ operation mode.